

Andrew H. Junkin, CFA, CIMA, CAIA Managing Director and Principal

August 6, 2008

Ms. Anne Stausboll Interim Chief Investment Officer California Public Employees' Retirement System 400 Q Street Sacramento, CA 95814

Re: Proposed Enhanced Equity Portfolio

Dear Anne,

You requested Wilshire's opinion with respect to Staff's proposal to create a US equity enhanced index strategy, using fixed income securities as the alpha engine and derivatives to provide equity market exposure. Wilshire supports this endeavor.

Recommendation

Since this is an information item, Wilshire recommends that the Investment Committee direct Staff to prepare this strategy for implementation as soon as possible, including specifying which policies will govern the implementation.

Discussion

The approach Staff is proposing to use is not an uncommon approach to enhanced equity investing and is commonly referred to as a "synthetic enhanced index product". Until recently, CalPERS has used external managers for this type of implementation. Last fall, as a part of an overall strategic review initiated by then-SIO Christy Wood, Wilshire recommended that synthetic enhanced indexing be brought in-house as a way to increase net returns. Our comments at that time were as follows:

"CalPERS currently employs several external synthetic enhanced index managers whose strategies are based on derivatives-based exposure to equity markets and collateral fixed income portfolios outperforming LIBOR. Currently, CalPERS has roughly \$1.8 billion invested with these external managers, or 1.2% of Global Equity assets. If CalPERS could bring the management of these assets in house, in conjunction with Global Fixed Income, CalPERS could save all of the fees that are currently paid to these external managers. Assuming the managers are paid 20 basis points, this move would save 2.4 basis points for Global Equity.

Ms. Anne Stausboll August 6, 2008 Page 2

In addition, we would propose that CalPERS be more opportunistic about its use of this approach. Since the performance of these mandates is largely influenced by the shape of the yield curve, CalPERS could easily turn the portfolios on or off on a quarterly basis based on the current investing and implied financing rates. Done correctly, this would prevent this strategy from acting as a drag on the alpha target in periods where LIBOR-based strategies underperform."

We view Staff's current proposal as a logical implementation of this opportunistic approach to alpha-generation. Specifically, Staff is proposing to use a portfolio parallel to Global Fixed Income's High Quality LIBOR Fund as the alpha engine for this product. If Fixed Income Staff can construct a portfolio that outperforms LIBOR, any additional returns will be ported onto equity derivatives providing equity index exposure plus alpha. Wilshire has discussed implementation issues with the SIOs for both Global Equity and Global Fixed Income and feel that both groups are able to implement this without sacrificing the quality work they perform on all of the other portfolios that are internally managed.

However, there are potential risks to successful implementation. First, from the fixed income side, the "alpha" generated by this strategy is largely a function of 1) intentional duration mismatches versus the cost of funds (LIBOR) since a normally upward-sloping yield curve provides additional return by investing for longer periods of time and 2) undertaking credit risk. Staff perceives that credit spreads are wide today (i.e., bonds are relatively cheap). However, as the past year has demonstrated, cheap assets can continue to fall in price. Or, as John Maynard Keynes noted, "The market can stay irrational longer than you can stay solvent." Nevertheless, if Staff can identify fixed income securities that are trading with yields above LIBOR and are "money good" (i.e., no defaults), the irrationality of the market would be washed away by the maturity of the securities at par.

A second set of risks comes from the derivative implementation of the equity exposure. First, with some derivatives, the risk of counter-party default is present. The vast majority, if not the entirety, of the derivatives portfolio will be constructed using futures, which are not exposed to this risk. In addition, CalPERS has policies that force ongoing monitoring and management of this risk, so Wilshire views this risk as minimal. Second, in order to replicate the equity exposure of the Wilshire 2500 index, CalPERS will have to build a basket of derivative contracts using a combination of large cap, mid cap and small cap equity derivate contracts since there is no easily tradable broad equity market derivative. While the tracking error of the derivatives basket should be very close to zero, small amounts of outperformance or underperformance could result from this misfit.

It should also be noted that, although not a risk per se, the equity exposure built through the derivatives would not be ex-Tobacco, as the current internally managed index funds are required to be. This is also the case with the derivatives exposure that is used to equitize any cash at the total fund level. While CalPERS could ask an investment bank to create an ex-tobacco swap for use in this process, doing so could be so costly that it

Ms. Anne Stausboll August 6, 2008 Page 3

would likely negate any gains from the credit investments and would also subject CalPERS to the counterparty risk from the derivative creator.

Conclusion

Wilshire believes that the Investment Committee should instruct Staff to take steps that prepare it for the possible implementation of this strategy. Wilshire has just completed its review of the Global Fixed Income program, including the High Quality LIBOR Fund, and believes that Staff has the capabilities and capacity to successfully implement this strategy.

If you have any questions or comments, please let me know.

Sincerely,

